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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/555,672	12/01/2000	Francois Court	ATOCM 183	9009

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EXAMINER

MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 12/24/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/555,672	Applicant(s) COURT ET AL.	
	Examiner Jeffrey C. Mullis	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 25-51 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 20-46, 48, 50 and 51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 47 and 49 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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All remaining rejections and/or objections follow.

Claims 47 and 49 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The term "semi-crystalline" renders the claims unclear since it cannot objectively be determined what level of crystallinity would be considered semi-crystalline. This term is relative and therefore unclear.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 47 and 49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Reiss et al., J. Macromol Sci. PHYS., 317(2), pages 355-374, 1980.

Reiss et al. disclose a blend containing a polystyrene and a polystyrene-polyisoprene polymethyl methacrylate block copolymer (abstract). Note Figure 4 for a combination with this block copolymer of polystyrene and polymethyl methacrylate. Since the

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polystyrene block could be expected to be compatible with the polystyrene, applicants' characteristics reasonably appear to be inherent as the author's composition contains 25 parts of styrene thermoplastic resin and 25 parts of block copolymer, Reiss's compositions may be said to have 50% styrene thermoplastic and 50% styrene block copolymer based on total styrene thermoplastic and block copolymer. However the molecular weight of the block copolymer of Reiss is higher than 200,000 grams per mole.

Applicants are given Official Notice that lower molecular weight macromolecular compositions are generally easier to fabricate than higher molecular weight ones although at some point mechanical properties become degraded in the fabricated product. Therefore it would have been obvious to a practitioner having ordinary skill in the art at the time of the invention to use applicants' molecular weights or to lower molecular weights to applicants' level in the expectation of achieving a composition having better fabricability in that it requires only routine experimentation to find the optimum or workable range of a result effective variable absent any showing of surprising or unexpected results.

Applicants' arguments filed 9-9-02 have been fully considered but they are not deemed to be persuasive.

At present, the search is confined to compositions containing a polystyrene-polyisoprene-polymethyl methacrylate

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triblock copolymer/polystyrene composition as set out in the previous Office action. Therefore only claims 47 and 49 read on the elected species. Claim 19 is still objected to as being allowable but dependent on a rejected base claim. It is noted that claim 19 as drafted in the previous Office action was broader in scope since claim 1 was broader in scope. Therefore if applicants desire, they may redraft claim 19 in independent form as it stood prior to applicants' amendment of 9-9-02 so long as any new issues under 35 U.S.C. § 112 second paragraph are not introduced.

With regard to the term "semi-crystalline", it is of course true that the term "semi-crystalline" is used in the art. However the fact that the term may be used in the art does not mean that the metes and bounds of the term are sufficiently delineated. While certainly the term "semi-crystalline" does not embrace 100% crystalline substances or 100% amorphous substances, it is not clear at what point a material should be viewed as semi-crystalline, i.e. 98% crystalline, 90% crystalline, 20% crystalline etc.

With regard to the remaining terms said to be an issue under 35 U.S.C. § 112 second paragraph in the previous Office action, these terms are not present in the elected claims (47 and 49) and therefore these terms are no longer at issue. The same can be said with regard to the rejection under 35 U.S.C. § 112 first

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paragraph. However with regard to the issue of enablement previously present, the Examiner agrees that it is well known in the art to end formation of one block and begin polymerization of the next block to form an additional block. However the claims recite nothing about forming an intermediate oligomer by such a method nor is it clear that such a structure could be produced by such a method in applicants' polymers.

With regard to the rejection under 35 U.S.C. § 102/103 over Reiss et al., only the rejection under 35 U.S.C. § 103 has been maintained.

While it well may be true that there is no mention within the article of a triblock polymer containing styrene, butadiene and methyl methacrylate, such an embodiment is currently not under consideration nor do claims 47 and 49 require such.

Applicants' amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS

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ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication should be directed to Jeffrey Mullis at telephone number (703) 308-2820.

J. Mullis:cdc

December 20, 2002

Jeffrey Mullis
Primary Examiner
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